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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,664	07/14/2003	Seiji Takei	240346US0	4743

22850 7590 02/23/2005

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ALEXANDRIA, VA 22314

EXAMINER
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CHEN, VIVIAN

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/617,664

Applicant(s)

TAKEI ET AL.

Examiner

Vivian Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7-2003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over LUTZ ET AL (US 5,006,601) in view of BAER (US 5,484,344).

LUTZ ET AL discloses a thermoplastic composition comprising a 1-95 wt% thermoplastic polyamide, 1-95 wt% modified polyolefin, and 1-50 wt% elastomer such as an acrylic elastomer, and up to 50 wt% fillers such as polytetrafluoroethylene (PTFE) particles, silica, and/or mica. (lines 1-10, col. 1; line 10-35, col. 4; line 43-48, col. 6; line 15-23, col. 13). However, the reference does not explicitly disclose the composition of the acrylate elastomers.

BAER '334 discloses that it is well known in the art to incorporate acrylic elastomers derived from C1-C8 alkyl (meth)acrylate and other copolymerizable vinyl monomers into thermoplastic polyamide composition in order to improve impact resistance. (Abstract; columns 3-4).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use known acrylate polymers as disclosed in BAER '335 in the compositions of LUTZ ET AL in order to improve the impact resistance and performance of a

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polyamide-based resin composition. The use of masterbatches and concentrates (claim 11) are a well known method of incorporating additives into thermoplastic resin compositions.

3. Claims 6-9, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over LUTZ ET AL (US 5,006,601) in view of BAER (US 5,484,344) as applied to claim 1 above, and further in view of SHIMIZU ET AL (US 5,030,667).

SHIMIZU ET AL '667 discloses that it is well known in the art to use composite PTFE powder having typical particle sizes of 0.05-1 microns, said powder comprising PTFE particles coated with an acrylic polymer as a modifying additive for thermoplastic resins such as polyamides in order to improving physical properties such as sliding and anti-adhesion characteristics.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use conventional PTFE-based powders as fillers in the compositions of LUTZ ET AL in order to improve physical properties and processing characteristics. In claims 7-9, the methods of forming the powder mixture are product-by-process limitations and are not further limiting in as so far as the structure of the product is concerned. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. ***The patentability of a product does not depend on its method of production.*** If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." [emphasis added] *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). See MPEP 2113. Once a product appearing substantially identical is

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found, the burden shifts to applicant to show a *unobvious* difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1993).

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vivian Chen whose telephone number is (571) 272-1506. The examiner can normally be reached on Monday through Thursday from 8:30 AM to 6 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones, can be reached on (571) 272-1535. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

The General Information telephone number for Technology Center 1700 is (571) 272-1700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

February 15, 2005



Vivian Chen  
Primary Examiner  
Art Unit 1773